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AUTHOR Allen, K. Eileen
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ABSTRACT

The paper focuses on various questions related to early intervention and education of delayed, disabled, and otherwise impaired children in integrated preschool and day care settings. Some areas of research are suggested. (Author/SBH)

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EARLY INTERVENTION AND INTEGRATION: IMPLICATIONS FOR RESEARCH

K. Eileen Allen[1]
University of Kansas

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
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As my contribution to this First World Congress on Future Special Education I propose to share with you some of my thoughts on mainstreaming the young handicapped child. I will raise various questions related to early intervention and the education of delayed, disabled and otherwise impaired children in integrated preschool and day care settings. I will attempt, also, to suggest some areas of research that might be extrapolated from these questions.

Like many of you, I am a firm believer and fervent proselytizer where early childhood integration is concerned. The inclusion of the handicapped child in regular preschool programs with non-handicapped children is probably one of the best strategies available for maximizing the handicapped child's potentials in all areas of development. In the United States we now have legislation that enables (and in some of our states, demands), that such integrated services be provided, that

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[1]K. Eileen Allen is Associate Professor and Laboratory Supervisor at the Edna A. Hill Child Development Laboratory, Department of Human Development, University of Kansas, Lawrence, Kansas 66045.

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we do educate our young handicapped children in least restrictive settings. These various pieces of legislation are numerous and too time-consuming to examine here today. (For a comprehensive review of early childhood handicapped legislation see Hayden, 1978.) However, the obvious conclusion to be drawn from the legislative activities of the past decade is that social and educational change is indeed upon us. Thus, the question: "Are we, the Early Childhood people, prepared to deal with such change? Can we translate our articles of faith regarding the benefits of the integration of handicapped preschoolers into reliable and verifiable procedures that will attest the efficacy of such integration?" One group of authors put this issue into focus by commenting,

> "We cannot arrest these changes until such time as research catches up, but we might note that research should at least follow on the heels of the changes that are taking place and should thereby provide better information with which to direct future change." (Edgerton, Eyman, and Silverstein, 1975, p. 79)

How can early childhood educators and developmental lists assist in directing future change? I would like to suggest, as a starter, that we encourage the use of preschool and day care classrooms as sites for research. This is in line with a timely suggestion by Lovitt: "research concerned with children should be conducted in schools, homes, or other places where children naturally reside"; and, "if research situations were established in school settings, then problems indigenous to that specific setting could be investigated." Establishing a research orientation in the schools themselves is even more imperative where atypical children are enrolled. Says Lovitt, "Since traditional techniques have not always been effective with these youngsters, more innovative techniques must be arranged and evaluated.

Over the years there have been a few research studies chipping away at this issue of in situ classroom research as it relates to the integration of handicapped and non-handicapped children in early childhood programs. True, most of the work has been done in laboratory classrooms in universities or in university affiliated centers. Nevertheless, the various methodologies are readily adaptable to community classrooms. I will cite a few of these studies by way of example.

Some of the earliest work was done by a group at the University of Washington in the mid 60's: Sidney W. Bijou, Donald M. Baer, Montrose M. Wolf, Todd Risley, Florence R. Harris, Betty Hart, Joan Buell, and myself, K. Eileen Allen, to name only several of the group. In a long series of studies these researchers demonstrated:

1. that severely impaired children could be included in regular preschool classes (Wolf, Risley, Johnston, Harris & Allen, 1967);
2. that individualized programs and data systems validating each child's progress were manageable components of a daily schedule and a teacher's duties (Hart, Allen, Buell, Harris & Wolf, 1964);
3. that generalization to other settings could and did obtain (Johnston, Kelley, Harris & Wolf, 1966);
4. that durable behavior change could be maintained (Allen, Hart, Buell, Harris & Wolf, 1964);
5. that there were long term benefits (Nedelman and Sulzbacher, 1972).

Before long this kind of research was initiated in other settings, with steady increase in number, quality, and sophistication of the studies. As the 1970's unfolded several researchers almost simultaneously began to examine a variety of questions and hypotheses relevant to the integrated preschool. Bricker and Bricker (1971, 1972, 1973, 1976) for example, demonstrated definite programmatic advantages in combining handicapped and non-handicapped children in the same program. Apolloni and Cooke (1975) looked at the presence of normally developing children and how such presence might influence, positively, teachers' expectations of handicapped children. These same researchers and others, particularly Guralnick (1976), also looked at ways in which developmentally advanced children might be employed as models and as social reinforcers for their handicapped peers.

These studies, focusing on such areas as peer and adult social reinforcement, reciprocity, and social interaction, point up, in my estimation, variables that may prove key factors in developing systematic procedures for the successful integration of handicapped children into existing preschool programs. Unfortunately, at this point there are still too few data to support this hypothesis conclusively; and what data there are point fairly consistently to a minimal level of spontaneous peer interaction and peer imitation between handicapped and non-handicapped children in a naturalistic or free field environment.[2]

Allen, Benning and Drummond (1972), for example, found that in order to get social interaction, teachers quite literally had to teach the handicapped child to play. Among widely heterogeneous groups of children

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[2]In a recent study, Peterson and Haralick (1977) suggests that some spontaneous parallel play may occur.

Feitelson, Weintraub, and Michaeli (1972) reported the low probability of spontaneous interactions occurring. The data of Devoney, Guralnick and Ruben (1974) indicated that handicapped children did not interact with the non-handicapped until teachers systematically structured play activities designed to promote such interaction. Furthermore, even such structuring was only minimally effective for the nonverbal children. Ray (1974) looked at an integrated toddler program composed of equal numbers of handicapped and non-handicapped youngsters. She found that handicapped children interacted significantly less in both groups and individual situations.

Such investigations soon gave rise to questions regarding imitation as a major component in the overall analysis of handicapped and non-handicapped interaction. Several of these precedent-setting imitation studies should be mentioned. Guralnick (1976b) demonstrated the effectiveness of two training strategies to promote imitation of toy use and verbal behavior in handicapped children, using their normal classmates as models. Apolloni and Cooke (1977) and a number of their colleagues conducted a series of studies on peer imitation training, looking at the effects (and side effects) associated with direct conditioning procedures when training young handicapped and non-handicapped children to imitate each other. In fact, these studies have opened a vast arena of inquiry related to early integration that goes far beyond the original imitation questions. (For a full reporting of this work see Apolloni and Cooke in Guralnick, 1978).

Even so brief a review of the early childhood integration literature points up how much needs to be done if we are to insure the future of the integrated preschool as a viable model for the education of young handicapped children. Fortunately, we have demonstrated over the years that

the preschool itself is an emminently suitable and fruitful domain for the systematic analyses of children's and teachers' behavior within a "natural" environment. In fact, such programmatic organization now has a rubric of its own - Guralnick (1973) calls it the research service model. Within this model there remain innumerable questions and problems related to the integration of handicapped and non-handicapped children in preschool settings. Therefore, at this point I will attempt to synthesize various of these issues and problems in such a way as to suggest areas in which systematic inquiry and analyses might be fruitful.

First, there is a great need for normative or descriptive data. We must get a better line on the everyday interaction patterns of children and teachers in preschool settings. As Apolloni and Cooke (1977) point out, "We cannot make judgments regarding the widespread advisability or necessity of behavior change strategies in integrated settings until we know more about the social behavior that is natural to such ecologies." Parenthetically, I might add, such descriptive data, especially as it relates to teacher-child and child-teacher initiations and interaction chains in various integrated preschool settings, is the focus of my research for the coming year. These data in turn, will form the basis for my next four years of research effort aimed at specifying incidental teaching strategies that work for handicapped and non-handicapped children.[3]

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[3]These studies as well as several other research areas mentioned below will comprise major components of the Kansas Research Institute for Early Childhood Education of the Handicapped, University of Kansas, Lawrence, Kansas, U.S.O.E. Grant #300-77-0308.

Another area in need of research relates to the effects of systematic variations in the developmental levels of handicapped and non-handicapped children. What is the optimum mix and match? Does a handicapped child need a certain repertoire of basic developmental skills in order to be a potentially reinforcing playmate for a non-handicapped peer? How much developmental disparity can obtain before social interaction ceases? Before imitation breaks down?

What about ratio? How many handicapped children and non-handicapped comprise an optimum grouping? To what extent does degree and kind of handicap make a difference? What about the ratio of teachers, paraprofessionals and volunteers to children in integrated settings?

How can parents be involved most effectively in the education of their young handicapped child? Is it true, as a fairly comprehensive body of literature suggests (Bronfenbrenner, 1974), that the preschool experience may have only minimal impact on a child unless parents are active partners in the intervention program? Or, even more pressing, may we have to invoke a total ecological exchange for some children in order to effect change (Heber, 1973)?

What curriculum models are best for integrating handicapped and non-handicapped children? What kinds of materials and equipment are most facilitative in increasing the interaction between handicapped and non-handicapped? We have known for years, for example, from studies in the 1930's (Updegraff and Herbert, 1933; Johnson, 1935) that the type and amount of play materials in the preschool setting are significant determinants of children's social play levels. Quilitch and Risley (1973) demonstrated a like phenomenon 40 years later. What, then, are the

implications of these findings in terms of the integrated preschool? (See LeBlanc, Etzel and Damask, 1978, for a discussion of the functional curriculum as it relates to early intervention and the integrated preschool.)

What are the most effective approaches to interdisciplinary intervention? How can children and families be provided with cohesive, interfaced services? What is the function of the early childhood educator within the interdisciplinary framework? (For a more complete review of these issues see Allen, Holm and Schiefelbusch, 1978.)

What about the overall outcome of mixing handicapped and nonhandicapped children? What are the developmental and educational results? Are we lessening the educational opportunities for the more able children by placing less able children in the same program (Scriven, 1976)? Or, to put it another way, in our effort to implement new procedures are we exercising appropriate safeguards so that one group of children is not served at the expense of another group? What are the moral and ethical and even legal aspects of integration, especially if outcomes are negative, or even inconclusive?

It is obvious there is much to be done! Yet, are we not fortunate to have so rich a field for empirical scrutiny? And, are we not fortunate, too, to have such an important one in terms of the future of young children - both the handicapped and the non-handicapped? However, in closing, I feel compelled to offer a word of caution - we must make sure that future efforts do not replicate past failures - that instead we work toward well-researched integration procedures and strategies that, to quote

Bricker (1978), "will ultimately assist in changing societal attitudes toward the handicapped child, modifying the handicapped child's self perceptions, eliminating deleterious effects of segregation, and developing more effective use of educational resources." (p. 11)

With such words to guide us, let us be on our way! Let us share our findings and together build a better educational future for the young handicapped children of our world.

References

Allen, K. E., Benning, P. M. and Drummond, T. W. Integration of normal and handicapped children in a behavior modification preschool: A case study. In G. Semb (Ed.), Behavior Analysis and Education. Lawrence, Kansas: University of Kansas Press, 1972.

Allen, K.E., Hart, B. M., Buell, J. S., Harris, F. R. and Wolf, M. M. Effects of social reinforcement on isolate behavior of a nursery school child. Child Development, 35, 511-518, 1964.

Allen, K. E. Holm, V. A. and Schiefelbusch, R. L. (Eds.). Early Intervention: A Team Approach. Baltimore: University Park Press, 1978.

Apolloni, T., Cooke, S. A., and Cooke, T. P. Establishing a normal peer as a behavioral model for delayed toddlers. Perceptual and Motor Skills, 44, 231-241, 1977.

Apolloni, T. and Cooke, T. P. Integrated programming at the infant, toddler, and preschool levels. In M. J. Guralnick (Ed.), Early Intervention and the Integration of Handicapped and Nonhandicapped Children. Baltimore: University Park Press, 1978.

Apolloni, T. and Cooke, T. P. Peer behavior conceptualized as a variable influencing infant and toddler development. American Journal of Orthopsychiatry, 45, 4-17, 1975.

Bricker, D. D. A rationale for the integration of handicapped and non-handicapped preschool children. In M. J. Guralnick (Ed.), Early Intervention and the Integration of Handicapped and Nonhandicapped Children. Baltimore: University Park Press, 1978.

Bricker, D. D. and Bricker, W. A. Toddler research and intervention project report: Year I. IMRCD Behavioral Science Monograph 20. Nashville, Tennessee: Institute on Mental Retardation and Intellectual Development, George Peabody College, 1971.

Bricker, D. D. and Bricker, W. A. Toddler research and intervention project report: Year I. IMRCD Behavioral Science Monograph 20. Nashville, Tennessee: Institute on Mental Retardation and Intellectual Development, George Peabody College, 1972.

Bricker, D. D. and Bricker, W. A. Toddler research and intervention project report: Year I. IMRCD Behavioral Science Monograph 20. Nashville, Tennessee: Institute on Mental Retardation and Intellectual Development George Peabody College, 1973.

Bricker, D., Bricker, W., Iacino, R. and Dennison, L. Intervention strategies for the severely and profoundly handicapped child. In N. Haring and L. Brown (Eds.), Teaching Severely/Profoundly Handicapped Individuals. New York: Grune and Stratton, 1976.

Bronfenbrenner, U. Is Early Intervention Effective? (Volume II). DHEW, OCD. Publication No. OHD 74-25.

Devoney, C., Guralnick, M. J. and Rubin, H. Integrating handicapped and nonhandicapped preschool children: Effects on social play. Childhood Education, 50, 360-364, 1974.

Edgerton, R. B., Eyman, R. K. and Silverstein, A. B. Mental retardation system. In N. Hobbs (Ed.), Issues in the Classification of Children (Volume I). San Francisco: Jossey-Bass, 1975.

Feitelson, D., Weintraub, S. and Michaeli, O. Social interactions in heterogeneous preschools. Child Development, 43, 1249-1259, 1972.

Guralnick, M. J. A research-service model for support of handicapped children. Exceptional Children, 39, 277-282, 1973.

Guralnick, M. J. Early childhood intervention: The use of nonhandicapped peers as educational and therapeutic resources. Paper presented at the International Congress of the International Association for the Scientific Study of Mental Deficiency, Washington, D.C., 1976b.

Guralnick, M. J. Integrated Preschools as Educational and Therapeutic Environments: Concepts, Design and Analysis. In Guralnick, M. J. (Ed.), Early Intervention and the Integration of Handicapped and Nonhandicapped Children. Baltimore: University Park Press, 1978.

Guralnick, M. J. The value of integrating handicapped and nonhandicapped preschool children. American Journal of Orthopsychiatry, 42, 236-245, 1976a.

Hart, B. M., Allen, K. E., Buell, J. S., Harris, F. R. and Wolf, M. M. Effects of social reinforcement on operant crying. Journal of Experimental Child Psychology, 1, 145-153, 1964.

Hayden, Alice H. Early childhood education. In Allen, K. E., Holm, V. A. and Schiefelbusch, R. K. (Eds.), Early Intervention: A Team Approach. Baltimore: University Park Press, 1978.

Heber, R. Garber, H. and Falender, C. The Milwaukee Project: An experiment in the prevention of cultural-familial retardation. Mimeographed, 1973.

Johnson, M. W. The effect on behavior of variation in amount of play equipment. Child Development, 6, 56-58, 1935.

Johnson, M. K., Kelley, C. S., Harris, F. R. and Wolf, M. M. An application of reinforcement principles to development of motor skills of a young child. Child Development, 37, 379-387, 1966.

Le Blanc, Etzel, Domash,
In Allen, K. E., et al (Eds.), Early Intervention: A Team Approach. Baltimore: University Park Press, 1978.

Lovitt, T. C. Chapter 9 in J. M. Kauffman and Hallinan, D. P. (Eds.), Teaching Children with Learning Disabilities: Personal Perspectives. Columbus, Ohio: Charles E. Merrill Publishing Company, 270-304, 1976.

Nedelman, D. and Sulzbacher, S. Dicky at 13 Years of Age: A Long Term Success Following Early Application of Operant Conditioning Procedures. In G. Semb (Ed.), Behavior Analysis and Education. Lawrence, Kansas: University of Kansas Press, 1972.

Peterson, N. L. and Haralick, J. G. Integration of Handicapped and Non-handicapped Preschoolers: An Analysis of Play Behavior and Social Interaction. Education and Training of the Mentally Retarded (Volume XII), 3, 235-245, 1977.

Quilitch, H. R. and Risley, T. R. The Effects of Play Materials on Social Play. Journal of Applied Behavior Analysis, 6, 573-578. 1973.

Ray, J. S. Behavior of Developmentally Delayed and Nondelayed Toddler-age Children: An Ethological Study. George Peabody College, Unpublished manuscript.

Scriven, M. Some Issues in the Logic and Ethics of Mainstreaming. Proceedings from July, 1975, Dean's Projects Conference. Minnesota Education, 2, 61-68, 1976.

Updegraff, R. and Herbst, E. K. An Experimental Study of the Social Behavior Stimulated in Young Children by Certain Play Materials. Journal of Genetic Psychology, 42, 377-391, 1933.

Wolf, M., Risley, T., Johnston, M., Harris, F. R., and Allen, K. E. Application of Operant Conditioning Procedures of the Behavior Problems of an Autistic Child. Behavior Research and Therapy, 5, 103-111, 1967.